

CLEAN VERSION OF CLAIMS

1. (Currently Amended) A CAD part library generator system utilizing a network and comprises:

a server computer that is connected to a network; and

at least one client computer that performs data transmission with said server computer via said network;

said server computer sends basic data, which are combinations of plurality of variable programs for drawing different part graphics and numerical data that are substituted into the variables of said variable programs, for CAD part graphic data from said server computer to said client computer according to a request from said client computer;

wherein said server computer comprises:

a storage means that stores basic data for said CAD part graphic data; and

a program data transmitting section that reads said basic data for CAD part graphic data from said storage means according to a request from said client computer, and sends that data to said client computer;

said client computer comprises:

a program data receiving section that receives said basic data for CAD part graphic data;

a computing section that creates CAD part graphic data based on said basic data; and

a CAD part graphic data producing section that creates display data for the graphic display unit in said client computer based on the CAD part graphic data created by said computing section;

said storage means of said server computer comprises a variable program storage section that stores said plurality of variable programs, and a numerical data storage section that stores a plurality of kinds of said numerical data according to a request from said client computer, then sends the specified variable and numerical data to said client computer; and

said computing section of said client computer substitutes said numerical values of specified numerical data into the variables of said specified variable program, then executes that program and creates CAD part graphic data,

wherein the client computer receives input of one or more additional numerical values and substitutes the additional numerical values into the variables of said specified variable program, wherein the client computer executes the program to create a modified CAD part graphic data, wherein the client computer displays the modified CAD part graphic data which is representative of a CAD generated part, and wherein the additional numerical values are associated with a dimension of the CAD generated part whereby a change to the additional numerical values results in a change to the dimension of the CAD generated part.

2. (Currently Amended) A CAD part library generator system utilizing a network and comprises:

a server computer that is connected to a network; and

at least one client computer that performs data transmission with said server computer via said network;

said server computer sends basic data for CAD part graphic data from said server computer to said client computer according to a request from said client computer;

wherein said server computer comprises:

a storage means that stores basic data for CAD part graphic data; and

a program data transmitting section that reads said basic data for CAD part graphic data from said storage means according to a request from said client computer, and sends that data to said client computer;

said client computer comprises:

a program data receiving section that receives said basic data for CAD part graphic data;

a computing section that creates CAD part graphic data based on said basic data for CAD part graphic data; and

a CAD part graphic data producing section that creates display data for the graphic display unit in said client computer based on the CAD part graphic data created by said computing section;

said basic data for CAD part graphic data comprises a plurality of variable programs for drawing different part graphics and numerical data that is substituted into the variables of said variable programs;

said storage means of said server computer comprises a variable program storage section that stores said plurality of variable programs, and a numerical data storage section that stores a plurality of kinds of said numerical data;

said program data transmitting section reads a specified variable program from said variable program storage section, and reads specified numerical data from said numerical data storage section according to a request from said client computer, then sends that data to said client computer;

said variable program is created using a non-compiler interpreter-type programming language; and

said computing section of said client computer comprises an interpreting function of said non-compiler interpreter-type programming language, and substitutes said specified numerical data into the variables of said specified variable program, then executes that variable program while interpreting it by the interpreting function of said computing section, and creates CAD part graphic data,

wherein the client computer receives input of one or more additional numerical values and substitutes the additional numerical values into the variables of said specified variable program, wherein the client computer executes the program to create a modified CAD part graphic data, wherein the client computer displays the modified CAD part graphic data which is representative of a CAD generated part, and wherein the additional numerical values are associated with a shape of the CAD generated part whereby a change to the additional numerical values results in a change to the shape of the CAD generated part.

3. (Previously Presented) The CAD part library generator system utilizing a network according to claims 1 or 2 wherein said client computer further comprises:

a graphic name list display control section for displaying a list of received graphic names of the basic data for CAD part graphic data provided from said server computer on the display unit; and

a selected graphic name transmitting section that sends the names of graphics selected from said list of graphic names to said server computer;

said program data transmitting section in said server computer reads said specified variable program and specified numerical data based on the graphic names that were sent from said selected graphic name transmitting section.

4. (Previously Presented) The CAD part library generator system utilizing a network according to claims 1 or 2 wherein said server computer further comprises:

a parts data list storage section that groups and stores part code numbers for each part and said numerical data corresponding to the code numbers;

said program data transmitting section transmits the part data list containing the code numbers and the numerical data to said client computer according to a request of said client computer;

said client computer further comprises:

a code number list display control section that creates a parts code number list from said sent parts data list transmitted, and displays the list on said graphics display unit; and

said computing section substitutes numerical data for the parts that correspond to the names of the part code numbers selected from said displayed parts code number list into the variables of the variable program that corresponds to the names of said graphics and creates CAD part graphic data.

5. (Previously Presented) The CAD part library generator system utilizing according to claim 4 wherein when part or all of the numerical data selected by the user in said client computer corresponds to the part code numbers selected from said part code number list in said client computer, said computing section of said client computer substitutes said numerical data

that was read from said parts data list storage section and said input data into the variables in said corresponding variable program and creates CAD part graphic data.

6. (Previously Presented) The CAD part library generator system utilizing a network according to claims 1 or 2 wherein said client computer further comprises:

a data format name selection function that is capable of selecting a data format name for the CAD software; and

said CAD part graphic data producing section converts the format of the CAD part graphic data created by said computing section, creates CAD part graphic data that suits the selected data format, assigns a file name and stores the data in the memory unit.

7. (Previously Presented) The CAD part library generator system utilizing a network according to claims 1 or 2 wherein said client computer further comprises:

an interface name selection function that is capable of selecting a name for the data-exchange interface provided by the CAD software; and

said CAD part graphic data producing section converts the format of the CAD part graphic data created by said computing section to create CAD part graphic data, and registers said CAD part graphic data directly in said CAD software by way of said data-exchange interface.

8. (Previously Presented) The CAD part library generator system utilizing network according to claims 1 or 2, further comprising a parts database management program for managing parts data in said program data transmitting section of said server computer.

9. (New) A method of designing parts, the method comprising:
 - displaying a parts list at a client computer;
 - receiving at the client computer a selection of a first part from the parts list;
 - transmitting over a network a request for the first part from the client computer to a server computer;
 - receiving at the client computer basic data associated with the first part that is sent from the server computer, the basic data being received in response to the request for the first part, the basic data comprising one or more variable programs and numerical data, the variable programs being for drawing different part graphics, the numerical data being substitutable into variables of the variable programs, wherein the variable programs and the numerical data are separately stored and maintained by the server computer;
 - substituting the numerical data into the variables of the variable programs and executing the variable programs to generate first graphic data, the substitution and execution being performed by the client computer;
 - displaying the first part at the client computer based on the generated first graphic data;
 - presenting a plurality of dimensions that define the first part;
 - receiving an input for each of the plurality of dimensions;
 - substituting the input into the variables of the variable programs and executing the variable programs to generate second graphic data, the substitution and execution being performed by the client computer without compiling of the variable programs; and
 - displaying a second part at the client computer based on the generated second graphic data, wherein the first and second parts have different shape.
10. (New) The method of claim 9, wherein the one or more variable programs are a plurality of variable programs that are each associated with a different surface of the first part.
11. (New) The method of claim 9, wherein the first and second parts are single components.
12. (New) The method of claim 9, further comprising presenting a selection of numerical values for each of the inputs.

13. (New) The system of claim 1, wherein the plurality of variable programs are each associated with a different surface of the CAD generated part.
14. (New) The system of claim 2, wherein the plurality of variable programs are each associated with a different surface of the CAD generated part.
15. (New) The system of claim 1, wherein the CAD generated part is a single component.